

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 5

Superfund Division

77 West Jackson Boulevard
Chicago, Illinois 60604-3590

EPA Region 5 Records Ctr.



225819

June 15, 2000

R. Berggreen, STS Consultants
LTD

Dear Mr.

Enclosed are photocopies of Global Positioning System maps that the U.S. Environmental Protection Agency produced for the Beverly Gravel site in Elgin, Illinois. Specifically,

- Figure 1.0 An overall site map showing each data point, with color coding by count rate;
- Figure 1.1 An interpolated map based upon the data in Figure 1.0, with color coding by count rate;
- Figure 2.0 A section of the total site map showing data points at the "water's edge" and the perimeter, with color coding by count rate;
- Figure 2.1 An expanded section of the "water's edge" map showing data points, with color coding by count rate;
- Figure 2.2 An interpolated map based upon the data in Figure 2.1; and
- Figure 3.0 A data point map of the "Flat," namely the site excluding the "water's edge" and perimeter data, color coded by count rate.

By way of explanation, the data point map represents each separate count rate data point taken using the Ludlum 2221 meter and an unshielded Ludlum 44-10, 2 x 2 sodium iodide detector held near ground level. The collection rate was one data point per second. The data is tied to longitude and latitude by the Trimble GPS equipment.

The interpolated maps are based on averages of adjacent count rate data points. This method is useful in turning data points into surfaces whereby areal clustering is more

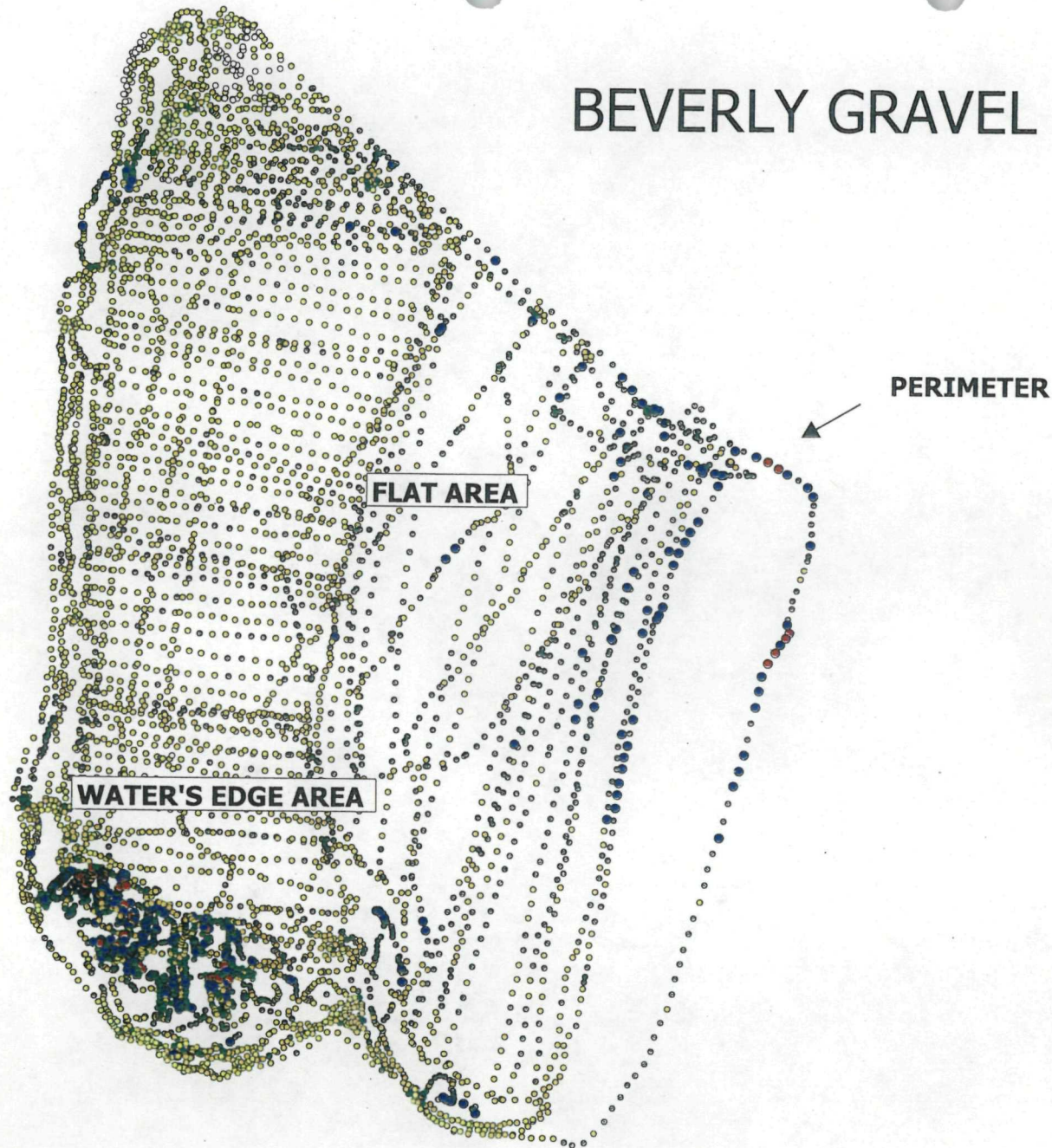
evident. However, when there is no intervening data between widely spaced data points, interpolation may create the appearance of clustering when there may be little or none. Therefore, interpolated maps should be used with judgment.

STS Consultants requested a disk of the complete data set. We have offered to provide this if they still desire it. We can provide this to you as well and, if necessary, give some suggestions on the software necessary to utilize it. Please let us know if you wish a data set disk.

Sincerely,

Larry Jensen, CHP
Senior Health Physicist
Emergency Response Section #3

BEVERLY GRAVEL SITE



TOTAL GAMMA RADIATION SURVEY

SODIUM IODIDE DETECTOR
(LUDLUM 2X2)

COUNTS/MINUTE

- 0 - 5,999
- 6,000 - 6,999
- 7,000-7,999
- 8,000 - 8,999
- 9,000 - 9,999
- 10,000 - 15,000

DATA COLLECTED 5/26/2000

PROJECTION INFORMATION:
UNIVERSAL TRANSVERSE MERCATOR
ZONE 16, NAD 83
METERS

30 0 30 60 Meters



FIGURE 1.0

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BEVERLY GRAVEL SITE



PERIMETER

FLAT AREA

TOTAL GAMMA RADIATION SURVEY

SODIUM IODIDE DETECTOR
(LUDLUM 2X2)

COUNTS/MINUTE



DATA COLLECTED 5/26/2000

PROJECTION INFORMATION:
UNIVERSAL TRANSVERSE MERCATOR
ZONE 16, NAD 83
METERS

Inverse Distance Weighted Interpolation
Cellsize: 0.2 meter
Neighbors: 8
Power: 4

WATER'S EDGE AREA



FIGURE 1.1

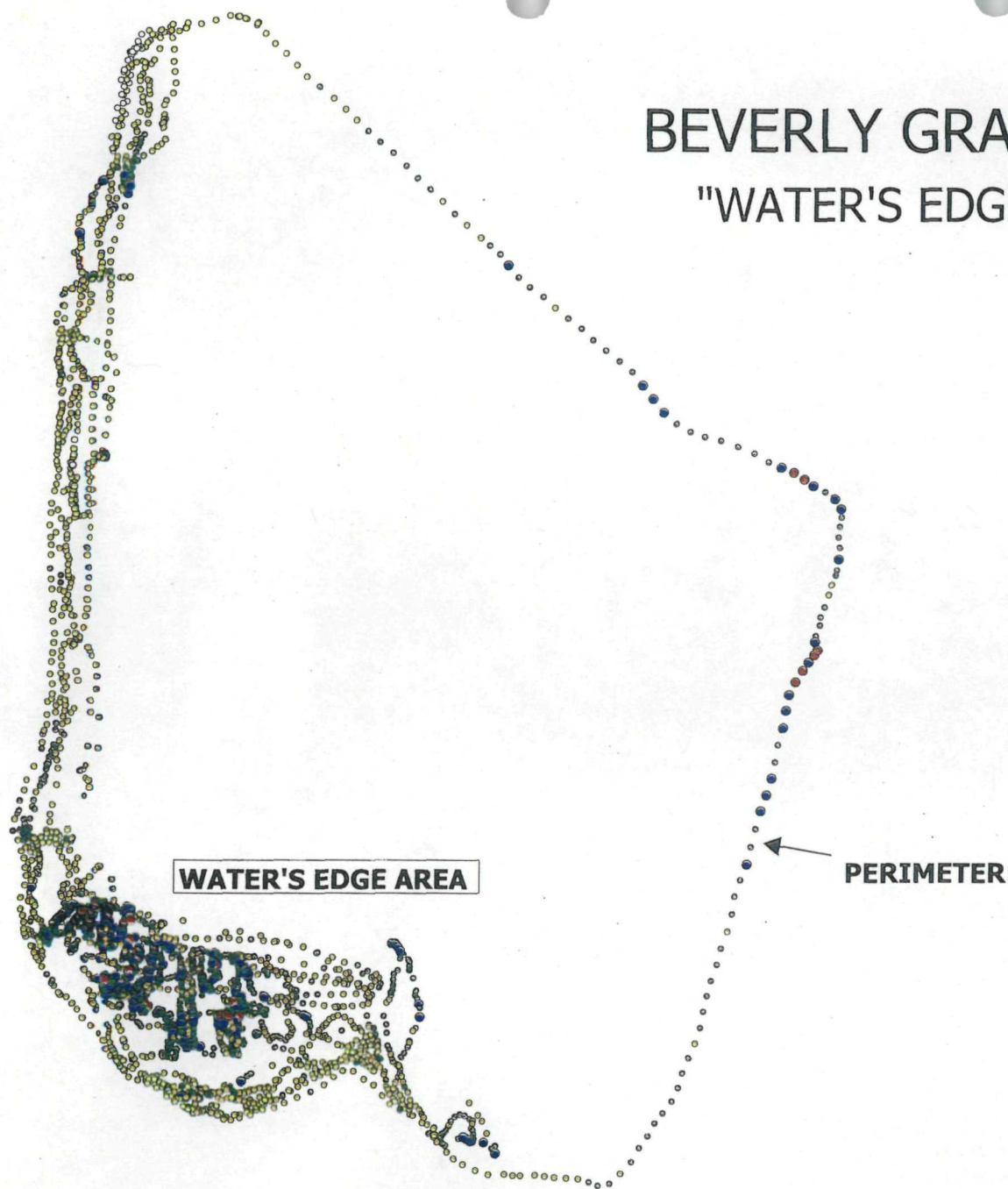
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BEVERLY GRAVEL SITE

"WATER'S EDGE" AREA



TOTAL GAMMA RADIATION SURVEY

SODIUM IODIDE DETECTOR
(LUDLUM 2X2)

COUNTS/MINUTE

- 0 - 5,999
- 6,000 - 6,999
- 7,000-7,999
- 8,000 - 8,999
- 9,000 - 9,999
- 10,000 - 15,000

DATA COLLECTED 5/26/2000

PROJECTION INFORMATION:
UNIVERSAL TRANSVERSE MERCATOR
ZONE 16, NAD 83
METERS



FIGURE 2.0

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TOTAL GAMMA RADIATION SURVEY

SODIUM IODIDE DETECTOR
(LUDLUM 2X2)

COUNTS/MINUTE

- 0 - 5,999
- 6,000 - 6,999
- 7,000 - 7,999
- 8,000 - 8,999
- 9,000 - 9,999
- 10,000 - 15,000

DATA COLLECTED 5/26/2000



BEVERLY GRAVEL SITE "WATER'S EDGE" AREA INSET

SITE MAP



20 0 20 Meters

FIGURE 2.1

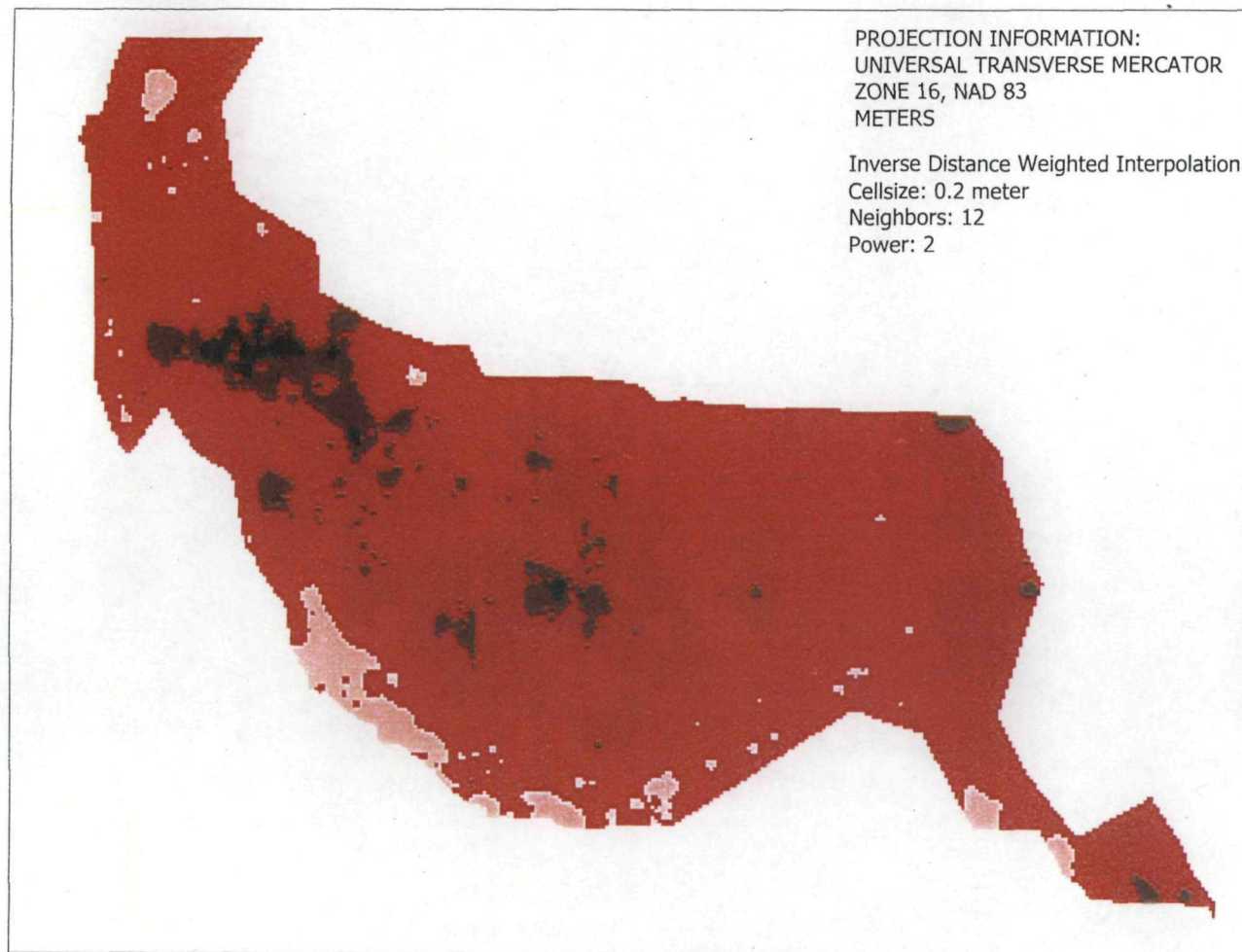
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PROJECTION INFORMATION:
UNIVERSAL TRANSVERSE MERCATOR
ZONE 16, NAD 83
METERS

Inverse Distance Weighted Interpolation
Cellsize: 0.2 meter
Neighbors: 12
Power: 2



TOTAL GAMMA RADIATION SURVEY

SODIUM IODIDE DETECTOR
(LUDLUM 2X2)

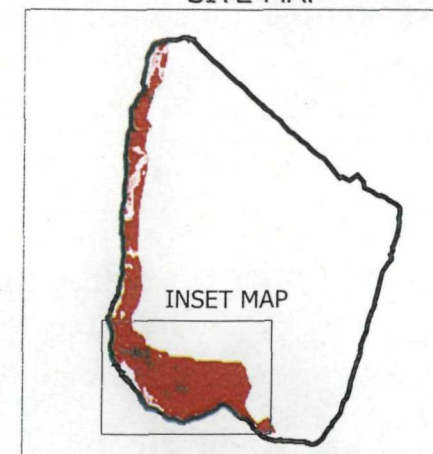
COUNTS/MINUTE



DATA COLLECTED 5/26/2000

BEVERLY GRAVEL SITE "WATER'S EDGE" AREA

SITE MAP



20 0 20 Meters

FIGURE 2.2

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BEVERLY GRAVEL SITE

"FLAT" AREA



TOTAL GAMMA RADIATION SURVEY

SODIUM IODIDE DETECTOR
(LUDLUM 2X2)

COUNTS/MINUTE

- 0 - 5,999
- 6,000 - 6,999
- 7,000 - 7,999
- 8,000 - 8,999
- 9,000 - 9,999
- 10,000 - 15,000

DATA COLLECTED 5/26/2000

PROJECTION INFORMATION:
UNIVERSAL TRANSVERSE MERCATOR
ZONE 16, NAD 83
METERS

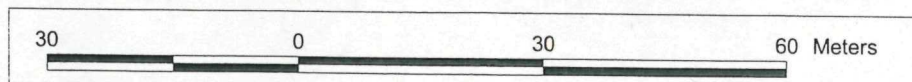


FIGURE 3.0

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